

Abstract Submitted
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Dependence of the Contact Angle on Self-Assembled Monolayer Production Method BROOKE OLLANDER, RYAN SAYKO, JARED NUTTER, SHANNON PETERSEN, ADELE POYNOR, Allegheny College — When water is forced in contact with a hydrophobic surface, it attempts to reduce its contact by forming a depletion layer. A depletion layer is defined as a nanometer scale low density region of water molecules at the surface. To alter the hydrophobicity of the slide, self-assembled monolayers (SAMs) are formed by utilizing the following organothiol solutions: 11-mercaptoundecanoic acid (hydrophilic) and 1-octadecanethiol (hydrophobic). The contact angle of slides with different organothiol solution exposure times is measured using a homemade goniometer and ImageJ software.

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